

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park.

| Species | Historical Records ^a | May 1999 - May 2001 |
|--|---------------------------------|---------------------|
| Acadian Flycatcher | X | X |
| American Black Duck | X | |
| American Coot | X | |
| American Crow | X | X |
| American Goldfinch | X | X |
| American Kestrel | X | X |
| American Redstart | X | X |
| American Robin | X | X |
| American Tree Sparrow | X | X |
| American Wigeon (<i>Anas americana</i>) | X | |
| American Woodcock | X | X |
| Bald Eagle | X | |
| Baltimore Oriole | X | X |
| Barn Owl | X | X |
| Barn Swallow | X | X |
| Barred Owl | X | X |
| Bay-breasted Warbler | | X |
| Belted Kingfisher | X | X |
| Black Vulture | X | X |
| Black-and-white Warbler | X | X |
| Black-billed Cuckoo | X | X |
| Black-capped Chickadee | X | X |
| Blackburnian Warbler | X | X |

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---|--------------------|---------------------|
| Blackpoll Warbler | X | X |
| Black-throated Blue Warbler | X | X |
| Black-throated Green Warbler | X | X |
| Blue Jay | X | X |
| Blue-gray Gnatcatcher | X | X |
| Blue-headed Vireo | X | X |
| Blue-Winged Teal (<i>Anas discors</i>) | X | |
| Blue-winged Warbler | X | X |
| Bobolink | X | X |
| Broad-winged Hawk | X | X |
| Brown Creeper | X | X |
| Brown Thrasher | X | X |
| Brown-headed Cowbird | X | X |
| Bufflehead | X | |
| Canada Goose | X | X |
| Canada Warbler | | X |
| Cape May Warbler | X | X |
| Carolina Chickadee | X | X |
| Carolina Wren | X | X |
| Cedar Waxwing | X | X |
| Cerulean Warbler | | X |
| Chestnut-sided Warbler | X | X |
| Chimney Swift | X | X |
| Chipping Sparrow | X | X |

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Historical Records | May 1999 - May 2001 |
|-------------------------------------|--------------------|---------------------|
| Common Grackle | X | X |
| Common Nighthawk | X | X |
| Common Raven | X | X |
| Common Snipe | X | X |
| Common Yellowthroat | X | X |
| Cooper’s Hawk | X | X |
| Dark-eyed Junco | X | X |
| Double-crested Cormorant | X | X |
| Downy Woodpecker | X | X |
| Eastern Bluebird | X | X |
| Eastern Kingbird | X | X |
| Eastern Meadowlark | X | X |
| Eastern Phoebe | X | X |
| Eastern Screech-owl | | X |
| Eastern Towhee | X | X |
| Eastern Wood-pewee | X | X |
| European Starling | X | X |
| Field Sparrow | X | X |
| Fish Crow | X | X |
| Fox Sparrow | X | X |
| Gadwall (<i>Anas strepera</i>) | X | |
| Golden Eagle | X | |
| Golden-crowned Kinglet | X | X |
| Grasshopper Sparrow | X | X |

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---|--------------------|---------------------|
| Gray Catbird | X | X |
| Gray Partridge (<i>Perdix perdix</i>) | X | |
| Gray-cheeked Thrush | X | |
| Great Blue Heron | X | X |
| Great Crested Flycatcher | X | X |
| Great Egret (<i>Ardea albus</i>) | X | |
| Great Horned Owl | X | X |
| Greater Yellowlegs (<i>Tringa melanoleuca</i>) | X | |
| Green Heron | X | X |
| Hairy Woodpecker | X | X |
| Henslow’s Sparrow | | X |
| Hermit Thrush | X | X |
| Hooded Merganser | X | |
| Hooded Warbler | X | X |
| Horned Grebe (<i>Podiceps auritus</i>) | X | |
| Horned Lark | X | X |
| House Finch | X | X |
| House Sparrow | X | X |
| House Wren | X | X |
| Indigo Bunting | X | X |
| Kentucky Warbler | | X |
| Killdeer | X | X |

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---|--------------------|---------------------|
| Laughing Gull | | X |
| Least Flycatcher | | X |
| Louisiana Waterthrush | X | X |
| Magnolia Warbler | X | X |
| Marsh Wren | X | |
| Mallard | X | X |
| Merlin (<i>Falco columbarius</i>) | X | |
| Mourning Dove | X | X |
| Mute Swan (<i>Cygnus olor</i>) | X | |
| Nashville Warbler | X | X |
| Northern Bobwhite (<i>Colinus virginianus</i>) | X | |
| Northern Cardinal | X | X |
| Northern Flicker | X | X |
| Northern Harrier | X | X |
| Northern Mockingbird | X | X |
| Northern Parula | X | X |
| Northern Rough-winged Swallow | X | X |
| Northern Saw-whet Owl | X | X |
| Orange-crowned Warbler | | X |
| Orchard Oriole | X | X |
| Osprey | X | X |
| Ovenbird | X | X |
| Palm Warbler | | X |

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---------------------------|--------------------|---------------------|
| Philadelphia Vireo | X | |
| Pileated Woodpecker | X | X |
| Pine Siskin | X | X |
| Pine Warbler | X | X |
| Prairie Warbler | X | X |
| Purple Finch | X | X |
| Purple Martin | X | X |
| Red-bellied Woodpecker | X | X |
| Red-breasted Nuthatch | X | X |
| Red-eyed Vireo | X | X |
| Red-headed Woodpecker | X | X |
| Red-shouldered Hawk | X | X |
| Red-tailed Hawk | X | X |
| Red-winged Blackbird | X | X |
| Ring-billed Gull | X | X |
| Ring-necked Duck | X | |
| Ring-necked Pheasant | X | X |
| Rock Dove | X | X |
| Rose-breasted Grosbeak | X | X |
| Ruby-crowned Kinglet | X | X |
| Ruby-throated Hummingbird | X | X |
| Ruffed Grouse | X | |
| Rusty Blackbird | | X |
| Savannah Sparrow | | X |

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---|--------------------|---------------------|
| Scaled Quail (<i>Callipepla squamata</i>) | X | |
| Scarlet Tanager | X | X |
| Sharp-shinned Hawk | X | X |
| Short-eared Owl | X | X |
| Song Sparrow | X | X |
| Spotted Sandpiper | X | |
| Swainson’s Thrush | X | X |
| Swamp Sparrow | | X |
| Tennessee Warbler | X | X |
| Tree Swallow | X | X |
| Tufted Titmouse | X | X |
| Tundra Swan | X | X |
| Turkey Vulture | X | X |
| Upland Sandpiper | | X |
| Veery | X | X |
| Vesper Sparrow | | X |
| Warbling Vireo | | X |
| White-breasted Nuthatch | X | X |
| White-crowned Sparrow | X | X |
| White-eyed Vireo | X | X |
| White-throated Sparrow | X | X |
| White-winged Crossbill (<i>Loxia leucoptera</i>) | X | |
| Wild Turkey | X | X |

Appendix AD. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Historical Records | May 1999 - May 2001 |
|--|--------------------|---------------------|
| Willow Flycatcher | X | X |
| Wilson’s Warbler | X | X |
| Winter Wren | X | X |
| Wood Duck | X | X |
| Wood Thrush | X | X |
| Worm-eating Warbler | X | X |
| Yellow Warbler | X | X |
| Yellow-bellied Sapsucker | X | X |
| Yellow-billed Cuckoo | X | X |
| Yellow-crowned Night-heron | X | X |
| Yellow-rumped Warbler | X | X |
| Yellow-throated Vireo | X | X |
| Total Number of Species | 159 | 151 |
| ^a Historical records were taken from the NPSpecies database (National Park Service 2001). | | |

Appendix AE. Classifications^a of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Gettysburg National Military Park.

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|------------------------------|------------------|----------|----------------|--------|
| Acadian Flycatcher | O | O | -- | -- |
| American Crow | A | A | A | A |
| American Goldfinch | C | U | C | U |
| American Kestrel | U | O | O | U |
| American Redstart | O | O | R | -- |
| American Robin | A | A | A | A |
| American Tree Sparrow | R | -- | -- | R |
| American Woodcock | R | -- | -- | -- |
| Baltimore Oriole | U | O | R | -- |
| Barn Owl | -- | -- | -- | R |
| Barn Swallow | C | C | O | -- |
| Barred Owl | R | R | O | C |
| Belted Kingfisher | R | R | R | R |
| Black Vulture | C | O | O | O |
| Black-and-white Warbler | O | R | R | -- |
| Black-billed Cuckoo | -- | R | R | -- |
| Black-capped Chickadee | -- | R | -- | -- |
| Blackburnian Warbler | R | -- | R | -- |
| Blackpoll Warbler | O | R | R | -- |
| Black-throated Blue Warbler | O | -- | O | -- |
| Black-throated Green Warbler | O | -- | O | -- |
| Blue Jay | A | A | A | A |
| Blue-gray Gnatcatcher | C | U | -- | -- |

Appendix AE. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|------------------------|------------------|----------|----------------|--------|
| Blue-headed Vireo | O | -- | R | -- |
| Bobolink | U | U | -- | -- |
| Broad-winged Hawk | O | R | R | -- |
| Brown Creeper | R | R | R | O |
| Brown Thrasher | O | O | R | -- |
| Brown-headed Cowbird | C | U | R | -- |
| Canada Goose | C | U | A | A |
| Canada Warbler | -- | -- | R | -- |
| Cape May Warbler | R | -- | -- | -- |
| Carolina Chickadee | C | C | C | A |
| Carolina Wren | O | O | O | O |
| Cedar Waxwing | O | O | O | U |
| Cerulean Warbler | R | -- | -- | -- |
| Chestnut-sided Warbler | R | -- | -- | -- |
| Chimney Swift | U | C | U | -- |
| Chipping Sparrow | U | U | -- | -- |
| Common Grackle | C | U | O | U |
| Common Nighthawk | R | -- | -- | -- |
| Common Raven | R | -- | R | R |
| Common Snipe | -- | -- | -- | R |
| Common Yellowthroat | O | O | O | R |
| Cooper's Hawk | O | R | R | O |
| Dark-eyed Junco | O | -- | -- | A |

Appendix AE. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|--------------------------|------------------|----------|----------------|--------|
| Double-crested Cormorant | R | -- | -- | -- |
| Downy Woodpecker | U | U | U | U |
| Eastern Bluebird | U | U | U | C |
| Eastern Kingbird | U | U | R | -- |
| Eastern Meadowlark | C | C | U | O |
| Eastern Phoebe | O | O | O | -- |
| Eastern Screech-owl | -- | -- | -- | O |
| Eastern Towhee | C | U | U | R |
| Eastern Wood-pewee | C | A | U | -- |
| European Starling | A | A | A | A |
| Field Sparrow | C | U | O | R |
| Fish Crow | O | O | -- | -- |
| Fox Sparrow | -- | -- | -- | R |
| Golden-crowned Kinglet | R | -- | R | U |
| Grasshopper Sparrow | O | O | R | -- |
| Gray Catbird | C | C | U | R |
| Great Blue Heron | R | R | R | R |
| Great Crested Flycatcher | C | C | R | -- |
| Great Horned Owl | -- | R | R | U |
| Green Heron | R | R | -- | -- |
| Hairy Woodpecker | O | O | O | O |
| Henslow's Sparrow | -- | -- | R | -- |
| Hermit Thrush | R | -- | R | -- |

Appendix AE. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|-------------------------------|------------------|----------|----------------|--------|
| Hooded Warbler | R | R | -- | -- |
| Horned Lark | R | -- | R | O |
| House Finch | U | O | O | C |
| House Sparrow | O | O | R | C |
| House Wren | C | C | O | -- |
| Indigo Bunting | O | U | -- | -- |
| Kentucky Warbler | R | R | -- | -- |
| Killdeer | O | O | O | O |
| Laughing Gull | -- | -- | R | -- |
| Least Flycatcher | R | R | -- | -- |
| Louisiana Waterthrush | R | -- | -- | -- |
| Magnolia Warbler | O | -- | O | -- |
| Mallard | O | -- | -- | O |
| Mourning Dove | C | C | U | A |
| Nashville Warbler | R | -- | R | -- |
| Northern Cardinal | A | C | U | U |
| Northern Flicker | C | U | U | U |
| Northern Harrier | -- | -- | O | O |
| Northern Mockingbird | C | C | U | U |
| Northern Parula | O | O | R | -- |
| Northern Rough-winged Swallow | -- | O | -- | -- |
| Northern Saw-whet Owl | -- | -- | -- | O |
| Orange-crowned Warbler | -- | -- | R | -- |

Appendix AE. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|---------------------------|------------------|----------|----------------|--------|
| Orchard Oriole | R | R | -- | -- |
| Osprey | R | -- | -- | -- |
| Ovenbird | O | O | R | -- |
| Palm Warbler | R | -- | R | -- |
| Pileated Woodpecker | O | O | O | O |
| Pine Siskin | -- | -- | -- | R |
| Pine Warbler | R | -- | R | -- |
| Prairie Warbler | R | R | R | -- |
| Purple Finch | O | -- | -- | R |
| Purple Martin | R | -- | -- | -- |
| Red-bellied Woodpecker | A | C | A | C |
| Red-breasted Nuthatch | R | -- | R | R |
| Red-eyed Vireo | U | C | O | -- |
| Red-headed Woodpecker | C | U | C | C |
| Red-shouldered Hawk | R | R | R | R |
| Red-tailed Hawk | C | C | U | C |
| Red-winged Blackbird | A | A | O | C |
| Ring-billed Gull | R | -- | -- | -- |
| Ring-necked Pheasant | -- | R | -- | -- |
| Rock Dove | U | U | A | C |
| Rose-breasted Grosbeak | R | R | R | -- |
| Ruby-crowned Kinglet | U | -- | R | R |
| Ruby-throated Hummingbird | R | R | R | -- |

Appendix AE. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|-------------------------|------------------|----------|----------------|--------|
| Rusty Blackbird | O | -- | -- | R |
| Savannah Sparrow | R | R | -- | -- |
| Scarlet Tanager | U | U | R | -- |
| Sharp-shinned Hawk | O | R | R | R |
| Short-eared Owl | -- | -- | -- | O |
| Song Sparrow | C | C | O | U |
| Swainson's Thrush | R | -- | -- | -- |
| Swamp Sparrow | -- | R | -- | -- |
| Tennessee Warbler | R | -- | R | -- |
| Tree Swallow | O | O | R | -- |
| Tufted Titmouse | A | C | C | A |
| Tundra Swan | -- | -- | -- | U |
| Turkey Vulture | A | A | A | C |
| Upland Sandpiper | R | -- | -- | -- |
| Veery | R | R | R | -- |
| Vesper Sparrow | R | R | -- | -- |
| Warbling Vireo | R | R | -- | -- |
| White-breasted Nuthatch | U | U | C | C |
| White-crowned Sparrow | -- | -- | -- | R |
| White-eyed Vireo | R | R | -- | -- |
| White-throated Sparrow | U | -- | -- | U |
| Wild Turkey | -- | -- | -- | O |
| Willow Flycatcher | R | R | R | -- |

Appendix AE. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Gettysburg National Military Park (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|--------------------------|------------------|----------|----------------|--------|
| Wilson's Warbler | -- | -- | R | -- |
| Winter Wren | R | -- | -- | -- |
| Wood Duck | R | R | -- | -- |
| Wood Thrush | A | A | O | -- |
| Worm-eating Warbler | R | -- | R | -- |
| Yellow Warbler | O | O | R | -- |
| Yellow-bellied Sapsucker | -- | -- | R | R |
| Yellow-billed Cuckoo | O | O | -- | -- |
| Yellow-rumped Warbler | C | -- | R | O |
| Yellow-throated Vireo | O | O | R | -- |
| Total Number of Species | 125 | 95 | 98 | 69 |

^a Classifications refer to the following categories: A, abundant (should be located in large numbers and in more than one habitat); C, common (should be located in fairly large numbers in appropriate habitat); U, uncommon (present in appropriate habitat, but not located in large numbers); O, occasional (present in some parcels of appropriate habitat, but not certain to be detected); R, rare (detected only a few times at most per season); --, none detected during the season.

Appendix AF. Relative abundance (average number/point/survey) of the most common long distance-migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest and herbaceous cover types during spring-migratory seasons (15 April - 25 May, 2000 and 2001) at Gettysburg National Military Park.

| Resident Status | Forest | Herbaceous |
|------------------------|--|--|
| | Species (Average Number/Point/Survey) | Species (Average Number/Point/Survey) |
| Long-distance Migrant | Wood Thrush (1.5) | Barn Swallow (1.0) |
| | Eastern Wood-pewee (0.7) | Bobolink (0.7) |
| | Red-eyed Vireo (0.6) | Chimney Swift (0.3) |
| | Great Crested Flycatcher (0.5) | Eastern Kingbird (0.2) |
| | Scarlet Tanager (0.5) | Yellow Warbler (0.1) |
| | Black-throated Blue Warbler (0.2) | Upland Sandpiper (< 0.1) |
| | Ovenbird (0.2) | Wood Thrush (< 0.1) |
| | American Redstart (0.2) | |
| | Acadian Flycatcher (0.2) | |
| | Magnolia Warbler (0.1) | |
| Short-distance Migrant | Blue-gray Gnatcatcher (0.6) | Red-winged Blackbird (3.3) |
| | Yellow-rumped Warbler (0.6) | Gray Catbird (0.2) |
| | White-throated Sparrow (0.5) | Killdeer (0.2) |
| | Eastern Towhee (0.5) | Grasshopper Sparrow (0.2) |
| | Ruby-crowned Kinglet (0.4) | Brown Thrasher (0.2) |
| | House Wren (0.2) | House Wren (0.2) |
| | Brown-headed Cowbird (0.2) | Brown-headed Cowbird (0.1) |
| | Red-winged Blackbird (0.2) | Tree Swallow (0.1) |
| | Gray Catbird (0.1) | Eastern Towhee (0.1) |
| | Blue-headed Vireo (0.1) | Field Sparrow (0.1) |
| | Chipping Sparrow (0.1) | Chipping Sparrow (0.1) |

Appendix AF. Relative abundance (average number/point/survey) of the most common long distance-migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest and herbaceous cover types during spring-migratory seasons (15 April - 25 May, 2000 and 2001) at Gettysburg National Military Park (continued).

| Resident Status | Forest | Herbaceous |
|--------------------|--|--|
| | Species (Average Number/Point/Survey) | Species (Average Number/Point/Survey) |
| Permanent Resident | Blue Jay (1.2) | European Starling (2.2) |
| | Tufted Titmouse (1.2) | American Robin (1.4) |
| | Northern Cardinal (0.9) | Eastern Meadowlark (1.0) |
| | Carolina Chickadee (0.9) | Common Grackle (0.3) |
| | Red-bellied Woodpecker (0.8) | Song Sparrow (0.3) |
| | Downy Woodpecker (0.5) | American Crow (0.3) |
| | White-breasted Nuthatch (0.4) | American Goldfinch (0.3) |
| | American Goldfinch (0.4) | Blue Jay (0.2) |
| | Northern Flicker (0.3) | American Kestrel (0.2) |
| | Red-headed Woodpecker (0.3) | Mourning Dove (0.2) |
| | | Northern Mockingbird (0.2) |

Appendix AG. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest and herbaceous cover types during breeding seasons (25 May - 15 July, 1999 and 2000) at Gettysburg National Military Park.

| Resident Status | Forest | Herbaceous |
|------------------------|--|--|
| | Species (Average Number/Point/Survey) | Species (Average Number/Point/Survey) |
| Long-distance Migrant | Wood Thrush (2.3) | Barn Swallow (1.0) |
| | Eastern Wood-pewee (1.0) | Chimney Swift (0.6) |
| | Red-eyed Vireo (0.6) | Bobolink (0.6) |
| | Scarlet Tanager (0.4) | Eastern Kingbird (0.1) |
| | Great Crested Flycatcher (0.3) | Baltimore Oriole (< 0.1) |
| | Acadian Flycatcher (0.3) | Yellow Warbler (< 0.1) |
| | Ovenbird (0.2) | |
| | Rose-breasted Grosbeak (0.1) | |
| | Baltimore Oriole (0.1) | |
| | Northern Parula (0.1) | |
| Short-distance Migrant | Eastern Towhee (0.2) | Red-winged Blackbird (3.6) |
| | House Wren (0.2) | House Wren (0.3) |
| | Blue-gray Gnatcatcher (0.2) | Grasshopper Sparrow (0.2) |
| | Brown-headed Cowbird (0.2) | Chipping Sparrow (0.2) |
| | Gray Catbird (0.2) | Field Sparrow (0.2) |
| | Eastern Phoebe (0.1) | Killdeer (0.1) |
| | Red-winged Blackbird (< 0.1) | Brown-headed Cowbird (0.1) |
| | | Gray Catbird (0.1) |
| | | Tree Swallow (0.1) |
| | | Eastern Phoebe (0.1) |

Appendix AG. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest and herbaceous cover types during breeding seasons (25 May - 15 July, 1999 and 2000) at Gettysburg National Military Park (continued).

| Resident Status | Forest | Herbaceous |
|--------------------|--|--|
| | Species (Average Number/Point/Survey) | Species (Average Number/Point/Survey) |
| Permanent Resident | Blue Jay (0.9) | European Starling (5.0) |
| | Tufted Titmouse (0.9) | Eastern Meadowlark (1.2) |
| | Northern Cardinal (0.6) | American Robin (0.6) |
| | White-breasted Nuthatch (0.6) | Common Grackle (0.5) |
| | American Robin (0.4) | Northern Mockingbird (0.5) |
| | Red-bellied Woodpecker (0.4) | Song Sparrow (0.3) |
| | Carolina Chickadee (0.4) | Mourning Dove (0.3) |
| | Downy Woodpecker (0.3) | American Kestrel (0.2) |
| | Red-headed Woodpecker (0.2) | Northern Cardinal (0.2) |
| | American Crow (0.1) | American Crow (0.2) |

Appendix AH. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest and herbaceous cover types during fall-migratory seasons (25 August - 10 October, 1999 and 2000) at Gettysburg National Military Park.

| Resident Status | Forest | Herbaceous |
|------------------------|--|--|
| | Species (Average Number/Point/Survey) | Species (Average Number/Point/Survey) |
| Long-distance Migrant | Eastern Wood-pewee (0.4) | Chimney Swift (0.3) |
| | Black-throated Blue warbler (0.3) | Eastern Kingbird (0.1) |
| | Red-eyed Vireo (0.3) | |
| | Black-throated Green Warbler (0.2) | |
| | Wood Thrush (0.1) | |
| | Black-and-white Warbler (0.1) | |
| | Ovenbird (0.1) | |
| | Blackpoll Warbler (0.1) | |
| | Magnolia Warbler (0.1) | |
| | Rose-breasted Grosbeak (0.1) | |
| | Scarlet Tanager (0.1) | |
| Short-distance Migrant | Eastern Towhee (0.1) | Killdeer (0.2) |
| | Gray Catbird (0.1) | Eastern Phoebe (0.1) |
| | Blue-headed Vireo (< 0.1) | Gray Catbird (0.1) |
| | Golden-crowned Kinglet (< 0.1) | Eastern Towhee (0.1) |
| | Hermit Thrush (< 0.1) | Grasshopper Sparrow (0.1) |
| | Palm Warbler (< 0.1) | Tree Swallow (0.1) |
| | Ruby-crowned Kinglet (< 0.1) | Field Sparrow (< 0.1) |
| | Yellow-rumped Warbler (< 0.1) | Henslow's Sparrow (< 0.1) |
| | | Palm Warbler (< 0.1) |

Appendix AH. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest and herbaceous cover types during fall-migratory seasons (25 August - 10 October, 1999 and 2000) at Gettysburg National Military Park (continued).

| Resident Status | Forest | Herbaceous |
|--------------------|--|--|
| | Species (Average Number/Point/Survey) | Species (Average Number/Point/Survey) |
| Permanent Resident | American Robin (1.4) | European Starling (8.4) |
| | Blue Jay (1.3) | Eastern Meadowlark (0.5) |
| | Red-bellied Woodpecker (0.9) | American Goldfinch (0.5) |
| | Carolina Chickadee (0.9) | Eastern Bluebird (0.5) |
| | Tufted Titmouse (0.9) | Mourning Dove (0.4) |
| | White-breasted Nuthatch (0.7) | Rock Dove (0.4) |
| | Red-headed Woodpecker (0.3) | American Crow (0.3) |
| | Northern Flicker (0.3) | Turkey Vulture (0.2) |
| | Downy Woodpecker (0.3) | Blue Jay (0.2) |
| | American Crow (0.1) | Northern Mockingbird (0.2) |
| | Cedar Waxwing (0.1) | |
| | Common Grackle (0.1) | |
| | European Starling (0.1) | |
| | Hairy Woodpecker (0.1) | |
| | Northern Cardinal (0.1) | |

Appendix AI. Relative abundance (average number/point/survey) of the most common short-distance migrant and permanent-resident bird species identified from point-count sampling points in forest and herbaceous cover types during winter seasons (1 December - 15 March, 1999-00 and 2000-01) at Gettysburg National Military Park.

| Resident Status | Forest | Herbaceous |
|------------------------|--|--|
| | Species (Average Number/Point/Survey) | Species (Average Number/Point/Survey) |
| Short-distance Migrant | Dark-eyed Junco (1.0) | White-throated Sparrow (0.1) |
| | Golden-crowned Kinglet (0.2) | White-crowned Sparrow (< 0.1) |
| | White-throated Sparrow (0.1) | |
| | Yellow-bellied Sapsucker (< 0.1) | |
| Permanent Resident | Red-bellied Woodpecker (0.9) | American Crow (0.6) |
| | Tufted Titmouse (0.9) | Canada Goose (0.6) |
| | White-breasted Nuthatch (0.9) | Mourning Dove (0.4) |
| | Blue Jay (0.6) | Eastern Bluebird (0.3) |
| | American Robin (0.6) | Turkey Vulture (0.3) |
| | Carolina Chickadee (0.5) | Eastern Meadowlark (0.3) |
| | Downy Woodpecker (0.4) | American Goldfinch (0.2) |
| | European Starling (0.4) | European Starling (0.2) |
| | American Crow (0.3) | House Finch (0.2) |
| | Red-headed Woodpecker (0.3) | American Kestrel (0.2) |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site.

| Species | Historical Records ^a | May 1999 - May 2001 |
|---|---------------------------------|---------------------|
| Acadian Flycatcher | X | X |
| Alder Flycatcher | X | |
| American Black Duck | X | |
| American Crow | X | X |
| American Goldfinch | X | X |
| American Kestrel | X | X |
| American Pipit (<i>Anthus rubescens</i>) | X | |
| American Redstart | X | X |
| American Robin | X | X |
| American Tree Sparrow | X | |
| American Wigeon | X | |
| American Woodcock | | X |
| Bald Eagle | | X |
| Baltimore Oriole | X | X |
| Bank Swallow (<i>Riparia riparia</i>) | X | |
| Barn Swallow | X | X |
| Barred Owl | | X |
| Bay-breasted Warbler | X | X |
| Belted Kingfisher | X | X |
| Black Vulture | X | X |
| Black-and-white Warbler | X | X |
| Black-billed Cuckoo | | X |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---|--------------------|---------------------|
| Black-capped Chickadee | X | X |
| Black-crowned Night-heron (<i>Nycticorax nycticorax</i>) | X | |
| Blackburnian Warbler | X | X |
| Blackpoll Warbler | X | X |
| Black-throated Blue Warbler | X | X |
| Black-throated Green Warbler | X | X |
| Blue Jay | X | X |
| Blue-gray Gnatcatcher | X | X |
| Blue-headed Vireo | X | X |
| Blue-winged Teal | X | |
| Blue-winged Warbler | X | X |
| Bobolink | X | |
| Brewster’s Warbler | | X |
| Broad-winged Hawk | X | X |
| Brown Creeper | X | X |
| Brown Thrasher | X | X |
| Brown-headed Cowbird | X | X |
| Bufflehead | X | |
| Canada Goose | X | X |
| Canada Warbler | X | X |
| Canvasback (<i>Aythya valisineria</i>) | X | |
| Cape May Warbler | X | |
| Carolina Chickadee | X | X |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---------------------------------------|--------------------|---------------------|
| Carolina Wren | X | X |
| Cedar Waxwing | X | X |
| Cerulean Warbler | X | X |
| Chestnut-sided Warbler | X | X |
| Chimney Swift | X | X |
| Chipping Sparrow | X | X |
| Cliff Swallow | X | X |
| Common Goldeneye | X | |
| Common Grackle | X | X |
| Common Loon (<i>Gavia immer</i>) | X | |
| Common Merganser | X | |
| Common Raven | | X |
| Common Yellowthroat | X | X |
| Cooper’s Hawk | X | X |
| Dark-eyed Junco | X | X |
| Double-crested Cormorant | X | |
| Downy Woodpecker | X | X |
| Eastern Bluebird | X | X |
| Eastern Kingbird | X | X |
| Eastern Meadowlark | X | |
| Eastern Phoebe | X | X |
| Eastern Screech-owl | X | X |
| Eastern Towhee | X | X |
| Eastern Wood-pewee | X | X |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---|--------------------|---------------------|
| European Starling | X | X |
| Evening Grosbeak (<i>Coccothraustes vespertinus</i>) | X | |
| Field Sparrow | X | X |
| Fish Crow | X | X |
| Fox Sparrow | X | |
| Gadwall | X | |
| Golden-crowned Kinglet | X | X |
| Grasshopper Sparrow | X | |
| Gray Catbird | X | X |
| Gray-cheeked Thrush | X | |
| Great Blue Heron | X | |
| Great Egret | X | |
| Great Crested Flycatcher | X | X |
| Great Horned Owl | X | X |
| Greater Scaup (<i>Aythya marila</i>) | X | |
| Green Heron | X | |
| Green-winged Teal (<i>Anas crecca</i>) | X | |
| Hairy Woodpecker | X | X |
| Henslow’s Sparrow | X | |
| Hermit Thrush | X | X |
| Herring Gull | X | |
| Hooded Merganser | X | |
| Hooded Warbler | X | X |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|--|--------------------|---------------------|
| Horned Grebe | X | |
| Horned Lark | X | |
| House Finch | X | X |
| House Sparrow | X | X |
| House Wren | X | X |
| Indigo Bunting | X | X |
| Kentucky Warbler | X | |
| Killdeer | X | X |
| Least Flycatcher | X | X |
| Lesser Scaup | X | |
| Little Blue Heron (<i>Egretta caerulea</i>) | X | |
| Loggerhead Shrike | X | |
| Long-eared Owl | | X |
| Louisiana Waterthrush | X | X |
| Magnolia Warbler | X | X |
| Mallard | X | X |
| Mourning Dove | X | X |
| Nashville Warbler | | X |
| Northern Cardinal | X | X |
| Northern Flicker | X | X |
| Northern Harrier | X | |
| Northern Mockingbird | X | X |
| Northern Parula | X | X |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|--|--------------------|---------------------|
| Northern Pintail (<i>Anas acuta</i>) | X | |
| Northern Rough-winged Swallow | X | X |
| Northern Saw-whet Owl | | X |
| Northern Waterthrush | X | |
| Oldsquaw (<i>Clangula hyemalis</i>) | X | |
| Olive-sided Flycatcher (<i>Contopus borealis</i>) | X | |
| Orchard Oriole | X | X |
| Osprey | X | |
| Ovenbird | X | X |
| Palm Warbler | X | X |
| Philadelphia Vireo | | X |
| Pied-billed Grebe | X | |
| Pileated Woodpecker | X | X |
| Pine Siskin | X | |
| Pine Warbler | X | X |
| Prairie Warbler | X | |
| Purple Finch | X | X |
| Red-bellied Woodpecker | X | X |
| Red-breasted Merganser (<i>Mergus serrator</i>) | X | |
| Red-breasted Nuthatch | X | X |
| Red-eyed Vireo | X | X |
| Red-headed Woodpecker | X | X |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|---|--------------------|---------------------|
| Red-shouldered Hawk | | X |
| Red-tailed Hawk | X | X |
| Red-winged Blackbird | X | X |
| Redhead (<i>Aythya americana</i>) | X | |
| Ring-billed Gull | | X |
| Ring-necked Duck | X | |
| Ring-necked Pheasant | X | X |
| Rock Dove | X | X |
| Rose-breasted Grosbeak | X | X |
| Rough-legged Hawk (<i>Buteo lagopus</i>) | X | |
| Ruby-crowned Kinglet | X | X |
| Ruby-throated Hummingbird | X | X |
| Ruddy Duck (<i>Oxyura jamaicensis</i>) | X | |
| Ruffed Grouse | X | X |
| Rusty Blackbird | X | |
| Savannah Sparrow | X | |
| Scarlet Tanager | X | X |
| Sharp-shinned Hawk | X | X |
| Snow Bunting | X | |
| Song Sparrow | X | X |
| Spotted Sandpiper | X | |
| Swainson’s Thrush | X | |
| Swamp Sparrow | X | |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|--------------------------|--------------------|---------------------|
| Tennessee Warbler | X | X |
| Tree Swallow | X | X |
| Tufted Titmouse | X | X |
| Tundra Swan | X | |
| Turkey Vulture | X | X |
| Veery | X | X |
| Vesper Sparrow | X | |
| White-breasted Nuthatch | | X |
| White-crowned Sparrow | X | |
| White-eyed Vireo | X | X |
| White-throated Sparrow | X | X |
| Wild Turkey | X | |
| Willow Flycatcher | | X |
| Wilson’s Warbler | X | |
| Winter Wren | X | |
| Wood Duck | X | |
| Wood Thrush | X | X |
| Worm-eating Warbler | X | X |
| Yellow Warbler | X | X |
| Yellow-bellied Sapsucker | X | X |
| Yellow-billed Cuckoo | X | X |
| Yellow-breasted Chat | X | |
| Yellow-rumped Warbler | X | X |

Appendix AJ. Bird species noted (indicated by an “X”) from historical records versus species detected from May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Historical Records | May 1999 - May 2001 |
|--|--------------------|---------------------|
| Yellow-throated Vireo | X | X |
| Yellow-throated Warbler | | X |
| Total Number of Species | 170 | 120 |
| ^a Historical records were taken from the NPSpecies database (National Park Service 2001). | | |

Appendix AK. Classifications^a of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Hopewell Furnace National Historic Site.

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|------------------------------|------------------|----------|----------------|--------|
| Acadian Flycatcher | O | O | -- | -- |
| American Crow | A | A | A | A |
| American Goldfinch | C | U | C | U |
| American Kestrel | -- | R | U | -- |
| American Redstart | U | R | O | -- |
| American Robin | C | C | U | R |
| Bald Eagle | -- | R | -- | -- |
| Baltimore Oriole | C | O | -- | -- |
| Barn Swallow | A | A | -- | -- |
| Barred Owl | -- | -- | -- | O |
| Bay-breasted Warbler | O | -- | -- | -- |
| Belted Kingfisher | -- | -- | R | -- |
| Black Vulture | O | U | U | O |
| Black-and-white Warbler | O | O | O | -- |
| Black-billed Cuckoo | O | O | O | -- |
| Black-capped Chickadee | O | -- | -- | -- |
| Blackburnian Warbler | R | -- | -- | -- |
| Blackpoll Warbler | U | R | O | -- |
| Black-throated Blue Warbler | O | -- | O | -- |
| Black-throated Green Warbler | U | -- | O | -- |
| Blue Jay | A | A | A | O |
| Blue-gray Gnatcatcher | U | U | R | -- |
| Blue-headed Vireo | O | -- | O | -- |

Appendix AK. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|------------------------|------------------|----------|----------------|--------|
| Blue-winged Warbler | O | -- | -- | -- |
| Brewster's Warbler | R | -- | -- | -- |
| Broad-winged Hawk | O | O | O | -- |
| Brown Creeper | -- | -- | -- | O |
| Brown Thrasher | R | -- | -- | -- |
| Brown-headed Cowbird | C | C | -- | -- |
| Canada Goose | O | -- | A | A |
| Canada Warbler | R | -- | O | -- |
| Carolina Chickadee | C | C | A | A |
| Carolina Wren | O | U | O | R |
| Cedar Waxwing | A | U | -- | -- |
| Cerulean Warbler | O | -- | R | -- |
| Chestnut-sided Warbler | O | -- | R | -- |
| Chimney Swift | O | O | O | -- |
| Chipping Sparrow | A | C | C | -- |
| Cliff Swallow | -- | R | -- | -- |
| Common Grackle | O | O | A | O |
| Common Raven | R | -- | -- | O |
| Common Yellowthroat | C | U | O | -- |
| Cooper's Hawk | O | -- | -- | R |
| Dark-eyed Junco | R | -- | -- | C |
| Downy Woodpecker | U | U | U | U |
| Eastern Bluebird | U | U | C | C |

Appendix AK. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|--------------------------|------------------|----------|----------------|--------|
| Eastern Kingbird | O | O | -- | -- |
| Eastern Phoebe | O | O | O | -- |
| Eastern Screech-owl | -- | -- | -- | A |
| Eastern Towhee | U | O | -- | -- |
| Eastern Wood-pewee | U | A | U | -- |
| European Starling | A | C | C | C |
| Field Sparrow | O | O | -- | -- |
| Fish Crow | O | O | -- | -- |
| Golden-crowned Kinglet | -- | -- | -- | U |
| Gray Catbird | C | C | O | -- |
| Great Crested Flycatcher | U | U | -- | -- |
| Great Horned Owl | -- | O | -- | U |
| Hairy Woodpecker | O | O | O | U |
| Hermit Thrush | R | -- | -- | -- |
| Hooded Warbler | O | -- | -- | -- |
| House Finch | U | U | U | U |
| House Sparrow | O | O | U | O |
| House Wren | U | U | -- | -- |
| Indigo Bunting | U | C | -- | -- |
| Killdeer | R | -- | R | -- |
| Least Flycatcher | O | -- | -- | -- |
| Long-eared Owl | -- | -- | -- | R |
| Louisiana Waterthrush | U | O | -- | -- |

Appendix AK. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|-------------------------------|------------------|----------|----------------|--------|
| Magnolia Warbler | O | -- | O | -- |
| Mourning Dove | O | O | O | O |
| Nashville Warbler | O | -- | O | -- |
| Northern Cardinal | C | C | U | O |
| Northern Flicker | O | U | U | O |
| Northern Mockingbird | O | O | R | O |
| Northern Parula | O | R | -- | -- |
| Northern Rough-winged Swallow | O | -- | -- | -- |
| Northern Saw-whet Owl | -- | -- | -- | O |
| Orchard Oriole | O | O | -- | -- |
| Ovenbird | A | A | O | -- |
| Palm Warbler | -- | -- | O | -- |
| Philadelphia Vireo | R | -- | -- | -- |
| Pileated Woodpecker | O | O | O | O |
| Pine Warbler | R | -- | -- | -- |
| Purple Finch | -- | -- | -- | O |
| Red-bellied Woodpecker | C | C | C | C |
| Red-breasted Nuthatch | -- | -- | O | R |
| Red-eyed Vireo | A | A | U | -- |
| Red-headed Woodpecker | R | O | -- | R |
| Red-shouldered Hawk | -- | -- | O | -- |
| Red-tailed Hawk | C | U | U | O |
| Red-winged Blackbird | U | O | -- | O |

Appendix AK. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|---------------------------|------------------|----------|----------------|--------|
| Ring-billed Gull | -- | -- | -- | O |
| Ring-necked Pheasant | -- | R | -- | O |
| Rock Dove | R | -- | -- | -- |
| Rose-breasted Grosbeak | O | O | -- | -- |
| Ruby-crowned Kinglet | O | -- | O | -- |
| Ruby-throated Hummingbird | -- | R | -- | -- |
| Ruffed Grouse | R | -- | -- | -- |
| Scarlet Tanager | A | A | O | -- |
| Sharp-shinned Hawk | -- | -- | O | -- |
| Song Sparrow | U | U | O | O |
| Tennessee Warbler | -- | -- | O | -- |
| Tree Swallow | O | O | -- | -- |
| Tufted Titmouse | C | C | C | C |
| Turkey Vulture | A | A | A | A |
| Veery | O | O | O | -- |
| White-breasted Nuthatch | U | U | C | C |
| White-eyed Vireo | R | -- | -- | -- |
| White-throated Sparrow | U | -- | O | O |
| Willow Flycatcher | R | -- | -- | -- |
| Wood Thrush | A | C | O | -- |
| Worm-eating Warbler | O | R | R | -- |
| Yellow Warbler | U | U | -- | -- |
| Yellow-bellied Sapsucker | -- | -- | R | R |

Appendix AK. Classifications of the relative abundance of bird species identified during spring-migratory (15 April - 25 May), breeding (25 May - 15 July), fall-migratory (25 August - 10 October), and winter seasons (1 December - 15 March), May 1999 - May 2001 at Hopewell Furnace National Historic Site (continued).

| Species | Spring Migration | Breeding | Fall Migration | Winter |
|-------------------------|------------------|----------|----------------|--------|
| Yellow-billed Cuckoo | O | O | R | -- |
| Yellow-rumped Warbler | A | -- | O | -- |
| Yellow-throated Vireo | O | U | -- | -- |
| Yellow-throated Warbler | R | -- | -- | -- |
| Total Number of Species | 98 | 71 | 65 | 44 |

^a Classifications refer to the following categories: A, abundant (should be located in large numbers and in more than one habitat); C, common (should be located in fairly large numbers in appropriate habitat); U, uncommon (present in appropriate habitat, but not located in large numbers); O, occasional (present in some parcels of appropriate habitat, but not certain to be detected); R, rare (detected only a few times at most per season); --, none detected during the season.

Appendix AL. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest cover type during spring-migratory seasons (15 April - 25 May, 2000 and 2001) at Hopewell Furnace National Historic Site.

| Resident Status | Species | Average Number/Point/Survey |
|------------------------|------------------------------|-----------------------------|
| Long-distance Migrant | Ovenbird | 1.6 |
| | Red-eyed Vireo | 1.1 |
| | Wood Thrush | 1.0 |
| | Scarlet Tanager | 0.7 |
| | Great Crested Flycatcher | 0.3 |
| | Eastern Wood-pewee | 0.2 |
| | Louisiana Waterthrush | 0.1 |
| | American Redstart | 0.1 |
| | Black-throated Green Warbler | 0.1 |
| | Baltimore Oriole | 0.1 |
| | Black-and-white Warbler | 0.1 |
| | Blackpoll Warbler | 0.1 |
| | Black-throated Blue Warbler | 0.1 |
| Short-distance Migrant | Yellow-rumped Warbler | 0.8 |
| | Brown-headed Cowbird | 0.3 |
| | Eastern Towhee | 0.2 |
| | Chipping Sparrow | 0.1 |
| | Common Yellowthroat | 0.1 |
| | Gray Catbird | 0.1 |
| | Blue-gray Gnatcatcher | 0.1 |
| | House Wren | 0.1 |
| | Eastern Phoebe | < 0.1 |
| | Hermit Thrush | < 0.1 |

Appendix AL. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest cover type during spring-migratory seasons (15 April - 25 May, 2000 and 2001) at Hopewell Furnace National Historic Site (continued).

| Resident Status | Species | Average Number/Point/Survey |
|--------------------|-------------------------|-----------------------------|
| Permanent Resident | Blue Jay | 0.9 |
| | Red-bellied Woodpecker | 0.5 |
| | Tufted Titmouse | 0.5 |
| | Cedar Waxwing | 0.4 |
| | Carolina Chickadee | 0.2 |
| | American Crow | 0.2 |
| | American Goldfinch | 0.2 |
| | American Robin | 0.2 |
| | Downy Woodpecker | 0.2 |
| | White-breasted Nuthatch | 0.2 |

Appendix AM. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest cover type during breeding seasons (25 May - 15 July, 1999 and 2000) at Hopewell Furnace National Historic Site.

| Resident Status | Species | Average Number/Point/Survey |
|------------------------|--------------------------|-----------------------------|
| Long-distance Migrant | Red-eyed Vireo | 1.8 |
| | Ovenbird | 0.9 |
| | Scarlet Tanager | 0.8 |
| | Eastern Wood-pewee | 0.5 |
| | Wood Thrush | 0.5 |
| | Indigo Bunting | 0.2 |
| | Acadian Flycatcher | 0.1 |
| | Great Crested Flycatcher | 0.1 |
| | Yellow-throated Vireo | 0.1 |
| | Veery | 0.1 |
| | Yellow-billed Cuckoo | 0.1 |
| Short-distance Migrant | Common Yellowthroat | 0.2 |
| | Brown-headed Cowbird | 0.2 |
| | Eastern Towhee | 0.1 |
| | Gray Catbird | 0.1 |
| | House Wren | 0.1 |
| | Blue-gray Gnatcatcher | 0.1 |
| | Chipping Sparrow | 0.1 |

Appendix AM. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest cover type during breeding seasons (25 May - 15 July, 1999 and 2000) at Hopewell Furnace National Historic Site (continued).

| Resident Status | Species | Average Number/Point/Survey |
|--------------------|-------------------------|-----------------------------|
| Permanent Resident | Carolina Chickadee | 0.5 |
| | Tufted Titmouse | 0.5 |
| | Blue Jay | 0.4 |
| | Northern Cardinal | 0.3 |
| | White-breasted Nuthatch | 0.2 |
| | Red-bellied Woodpecker | 0.2 |
| | American Crow | 0.2 |
| | Hairy Woodpecker | 0.2 |
| | American Goldfinch | 0.1 |
| | Downy Woodpecker | 0.1 |

Appendix AN. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest cover type during fall-migratory seasons (25 August - 10 October, 1999 and 2000) at Hopewell Furnace National Historic Site.

| Resident Status | Species | Average Number/Point/Survey |
|------------------------|------------------------------|-----------------------------|
| Long-distance Migrant | Eastern Wood-pewee | 0.3 |
| | Red-eyed Vireo | 0.2 |
| | Black-and-white Warbler | 0.1 |
| | Black-throated blue Warbler | 0.1 |
| | American Redstart | 0.1 |
| | Scarlet Tanager | 0.1 |
| | Black-billed Cuckoo | 0.1 |
| | Black-throated Green Warbler | 0.1 |
| | Canada Warbler | 0.1 |
| | Magnolia Warbler | 0.1 |
| | Ovenbird | 0.1 |
| | Tennessee Warbler | 0.1 |
| | Veery | 0.1 |
| | Wood Thrush | 0.1 |
| Short-distance Migrant | Common Yellowthroat | 0.1 |
| | White-throated Sparrow | 0.1 |
| | Palm Warbler | 0.1 |
| | Ruby-crowned Kinglet | 0.1 |
| | Yellow-rumped Warbler | 0.1 |

Appendix AN. Relative abundance (average number/point/survey) of the most common long-distance migrant, short-distance migrant, and permanent-resident species identified from point-count sampling points in forest cover type during fall-migratory seasons (25 August - 10 October, 1999 and 2000) at Hopewell Furnace National Historic Site (continued).

| Resident Status | Species | Average Number/Point/Survey |
|--------------------|-------------------------|-----------------------------|
| Permanent Resident | Carolina Chickadee | 1.0 |
| | Blue Jay | 0.7 |
| | Tufted Titmouse | 0.7 |
| | White-breasted Nuthatch | 0.4 |
| | Downy Woodpecker | 0.3 |
| | Red-bellied Woodpecker | 0.3 |
| | American Goldfinch | 0.2 |
| | Northern Cardinal | 0.2 |
| | Hairy Woodpecker | 0.2 |
| | American Crow | 0.2 |

Appendix AO. Relative abundance (average number/point/survey) of the most common short-distance migrant and permanent-resident species identified from point-count sampling points in forest cover type during winter seasons (1 December - 15 March, 1999-00 and 2000-01) at Hopewell Furnace National Historic Site.

| Resident Status | Species | Average Number/Point/Survey |
|------------------------|--------------------------|-----------------------------|
| Short-distance Migrant | Red-winged Blackbird | 0.2 |
| | Golden-crowned Kinglet | 0.1 |
| | Dark-eyed Junco | 0.1 |
| | Yellow-bellied Sapsucker | < 0.1 |
| Permanent Resident | Carolina Chickadee | 0.5 |
| | Red-bellied Woodpecker | 0.4 |
| | American Crow | 0.4 |
| | Tufted Titmouse | 0.3 |
| | White-breasted Nuthatch | 0.3 |
| | American Goldfinch | 0.1 |
| | Hairy Woodpecker | 0.1 |
| | Common Grackle | 0.1 |
| | Downy Woodpecker | 0.1 |
| | House Finch | 0.1 |

Click on the appropriate document to open it:

[Text of Report](#)

[List of Appendices](#)

[Appendices A – L](#)

[Appendices M – AC](#)

[Appendices AP - BA](#)

